

Title

Changing the Skills of Science:
An Empirical Study of How Research and Innovation Policy Affect Scientific
Knowledge Production in Universities

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Abstract

For long, the roads towards the scientific knowledge as an end product have been left to the researchers themselves and the normative regulations in their respective scientific communities. My PhD project follows the event of research leadership at different levels in the policy system as an indicator of the changing skills of science. Stakeholders' (OECD, EU, national states and university organizations) involvement in scientific activity shifts the attention from the individual research leader within a disciplinary tradition towards a more standardized idea of how to best lead and manage research related activity. How the event of research leadership in policy is implemented in the research and innovation system and its implications in practise remains to be shown.

Overall Research Questions:

- i) How do national governance instruments affect how leaders and university management manoeuvre and initiate new practices?
- ii) How does research and innovation policy affect scientific knowledge production in universities?

Keywords

Transformation, Research and Innovation Policy, Universities, Skills of Science

The articles:

Stakeholders have long been concerned with scientific knowledge as a driving resource in the economy. Today, these multiple stakeholders participate in the legitimization of research leadership in university settings and thus, the establishment of research leadership as a skill in need of formal training and organized reflection. This is visible (among others) in founding schemes focusing on research groups as the primary unit of knowledge production and the attention on the primary investigators experience in leading peers. The pending articles addressing these issues are:

1. The Answer to Complexity: The Emergence of Research Leadership as Policy - The Case of Norway
2. Colombo's Egg: the Case of Research Leadership in Centers of Excellence Evaluations in Canada, Sweden and Norway
3. The Skill of Leading Your Peers: Apprenticeship in Thinking in a Research Leadership Programs the Case of a Research Leadership Program at the University of Oslo

The articles answers different research questions using different empirical evidence, conceptual tools and methodological approaches. They can be read as separate contributions to the extensive literature on the changing role of modern universities. However, framed by an introduction the articles make up a broader landscape of the ways in which research and innovation policy affect academic staff with a research-intensive workload.

The articles are local in their orientation and I will do no attempt to generalize. However, the issues they raise are, as the university is, part of the international community of science.

Approaching the issue:

The thesis presented builds on two main understandings; the first is that scientific knowledge production, innovation and universities have co-evolved. Hence, it is not good to see them in isolation but as in a dialectic relationship. The second understanding concerns scientific knowledge production as a social activity. Following this, central references are literature from the research and innovation policy domain, selected texts from the philosophies of science, sociology of knowledge, theory of innovation and science and technology studies (STS). In order to operationalize the empirical findings neo- institutional theory from sociology will be the prominent theoretical toolbox. Together with a variation of methodological choices the thesis is best described as a study within the social sciences influenced by the humanities.

The empirical data range from participant observation of a ten day research leadership course given at the University of Oslo (2012) to policy documents, interviews and Centre of Excellence evaluations (Canada, Sweden and Norway). I also include what is labelled the diagnostic literature on university change (e.g. Mode2) as part of the empirical evidence.

Preliminary Results:

- Research Leadership is a new organizational field in the making.
- The need for formal training is legitimized in the university organization as a whole and the leadership challenge is described as special to the university setting.
- Administrative professionals are in strategic positions and dominate the field formation of research leadership claiming to act for organizational as well as professional interests.
- Researchers from all disciplines attend the RLP and they give various reasons

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